

What is claimed is:

1. A device for connecting hollow organs and/or sealing wall defects in hollow organs, having a base mounting which has at least one recess on a first surface;

at least one guidetrack for at least one spiral needle in which a spiral needle is movable forwards in a rotatable fashion; and

the guidetrack for the spiral needle being disposed at least partially along the edge of the recess in such a manner that the track of the spiral needle during a revolution extends partially in the base mounting and partially in the recess.

2. The device according to claim 1, wherein the guidetrack in the region at a distance from the recess and/or in the region along the edge of the recess has the configuration of a spiral or of circular segments of a spiral.

3. The device according to claim 2, wherein the guidetrack in the region along the edge of the recess has the configuration of circular segments of a spiral, the respective ends of which form openings in the base mounting along the edge of the recess.

4. The device according to claim 2, wherein the guidetrack in the region at a distance from the recess and/or in the region along the recess has the configuration of a spiral or of circular segments of a spiral and has an internal diameter which is greater than or equal to the diameter of a spiral needle.

5. The device according to claim 1, wherein the guidetrack in the region at a distance from the recess is configured as a boring with an internal diameter which is greater than or equal to the external diameter of the spiral formed by the spiral needle.

6. The device according to claim 1, wherein at least in portions along the recess on the surface of the base mounting there are disposed suction openings for drawing in and fixing the edges of an opening of a hollow organ.

7. The device according to claim 1, wherein along the guidetrack there is disposed at least one roller, the axis of rotation of which is essentially parallel to the direction of passage of the guidetrack.

8. The device according to claim 1, wherein the roller is connected to a drive in a non-positive manner for rotation of the roller.

9. The device according to claim 1, wherein the guidetrack in the region outwith the recess along its direction of passage is opened towards the second surface of the base mounting which is situated opposite the first surface.

10. The device according to claim 1, wherein between the second surface and the guidetrack, a slot is disposed along the guidetrack.

11. The device according to claim 1, wherein at least along the recess, the surface of the base mounting has a recess for receiving a hollow organ.

12. The device according to claim 1, wherein on the first surface, further suction openings are disposed for drawing in tissue and/or a hollow organ.

13. The device according to claim 1, wherein the base mounting has a carrier element on its side orientated towards the first surface, which carrier element is mounted rotatably on the base mounting.

14. The device according to claim 13, wherein the carrier element has suction openings for drawing in a tissue or a hollow organ.

15. The device according to claim 13, wherein the carrier element has an annular configuration.

16. The device according to claim 15, wherein the carrier element extends along the external edge of the first surface.

17. The device according to claim 1, wherein the guidetrack is disposed along the recess in such a manner that the spiral needle can be guided at least partially between two edges of the recess which are situated opposite each other.

18. The device according to claim 17, wherein the guidetrack is disposed in portions along two edges of the recess which are situated opposite each other in such a manner that the portions of the guidetrack which are disposed along the edges of the recess which are situated opposite each other form segments of a single spiral.

19. The device according to claim 1, wherein at least two guidetracks are disposed in the base mounting and, situated opposite each other, extend in introduced into the artery to be sutured and the probe knife has a probe at its tip which is flexible and in the central part of the probe knife there is located a blade which is aligned by the probe and hence the incision is made in the vascular wall taking into account for example the vascular wall thickness, and at the same time, the opening of the base mounting can be orientated by rotation along the probe axis.

20. The device according to claim 19, wherein the two guidetracks intersect at least one of the beginning and at the end of their course along the recess, intertwine in each other or extend directly adjacent to each other.

21. The device according to claim 1, wherein the recess extends from the first to the second surface.

22. The device according to claim 1, wherein an adapter element which is configured so as to be engagable at least partially in a form fitting manner from the direction of the second surface into the recess.

23. The device according to claim 22, wherein the adapter element has a boring for receiving a hollow organ portion, which boring extends from the side orientated towards the base mounting to the side orientated away from the base mounting.

24. The device according to claim 23, wherein the longitudinal axis of the boring extends at a predetermined angle relative to the first surface.

25. The device according to claim 23, wherein the walls of the boring have suction openings for drawing in and fixing a hollow organ portion or its edge.

26. The device according to claim 24, wherein the walls of the boring have at least one guidetrack which completes that at least one guidetrack of the base mounting to form a common guidetrack for a spiral needle.

27. The device according to claim 1, wherein at least one of the base mounting and the adapter element can be divided into at least two parts along the recess.

28. The method for connecting hollow organs and/or for sealing wall defects in hollow organs, characterized in that by using a device according to claim 1, comprising the step of guiding at least one spiral needle in a rotating manner through the adjacent edges of the same or of two different hollow organ openings.

29. The method according to claim 28 further comprising the step on pulling a thread through the edge of the opening of the hollow organ with each spiral needle.

30. The method according to claim 29 further comprising the steps of removing the spiral needle and connecting the thread ends to each other.

31. The method according to claim 30 comprising the step of tying the thread ends to each other.